



Community Capacity Building for Energy Conservation & Efficiency



Minnesota Pollution
Control Agency



What is Minnesota GreenCorps?

Minnesota GreenCorps is a **statewide initiative** to help preserve and protect Minnesota's environment while training a new generation of environmental professionals.



The Minnesota Pollution Control Agency (MPCA) applied for and received a grant from ServeMinnesota and the Corporation for National Community Service in 2009 to initiate an environment-focused AmeriCorps program in Minnesota.

What is AmeriCorps?

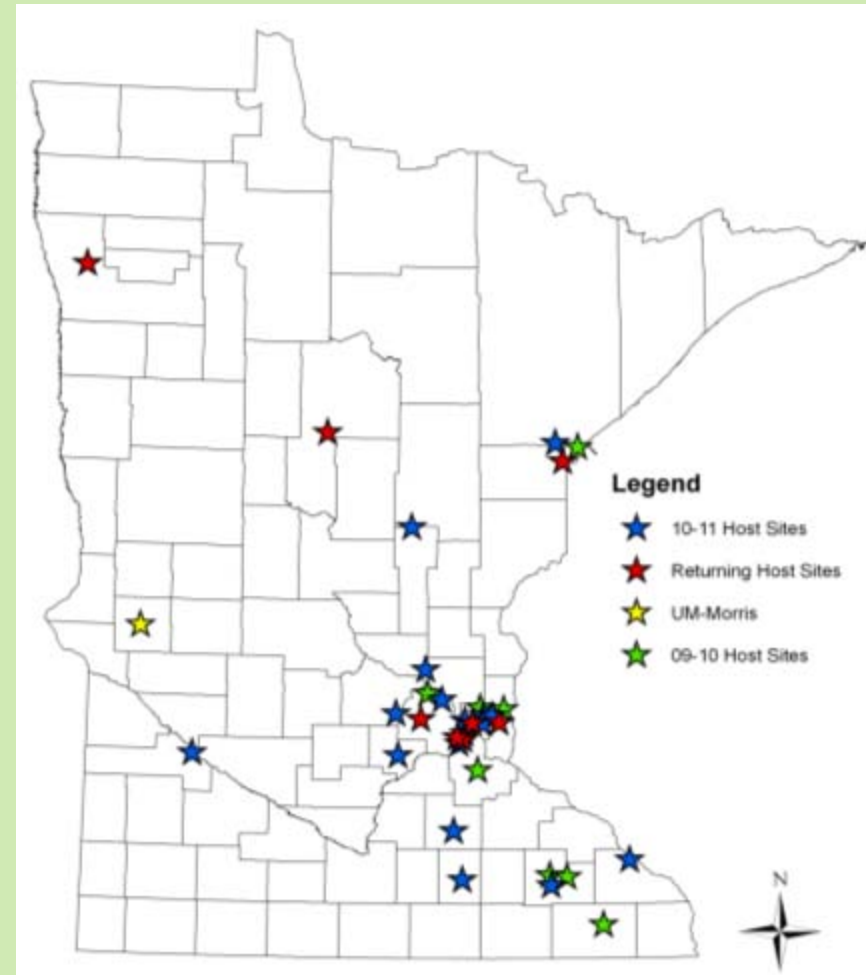


AmeriCorps is a network of local, state, and national service programs that connects more than 85,000 Americans each year in intensive service to meet our country's critical needs in education, **the environment**, health, veterans' services, and economic opportunity.



Minnesota GreenCorps: Program Model

- Coordinated by the state's lead environmental agency, MPCA
- Focus areas align with State environmental priorities
- MPCA provides member training and mentoring, with support from other state agencies
- Statewide reach
- Host sites selected through an open and competitive process
- Partnership with U of M, Morris
- 31 members serving in 2010-2011



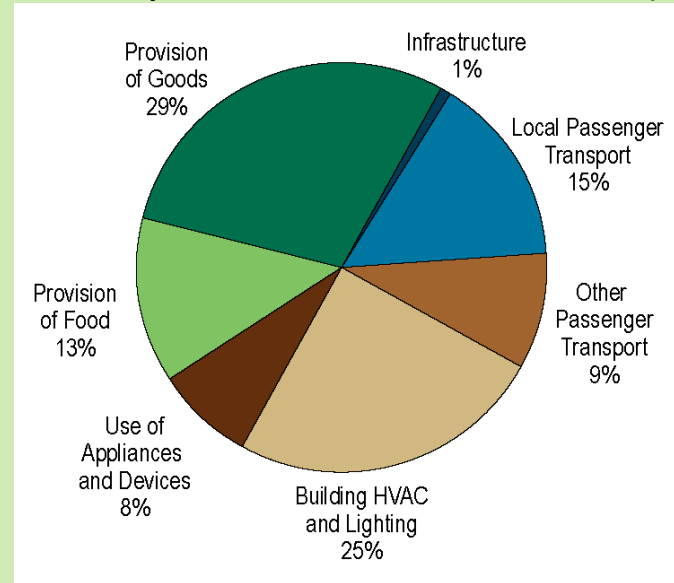
Focus Areas

Energy Conservation/Air Quality

- Assist organizations to benchmark and conserve energy, and reduce greenhouse gas (GHG) emissions and other air pollutants.
- Assist with active living and multi-modal transportation planning and implementation.



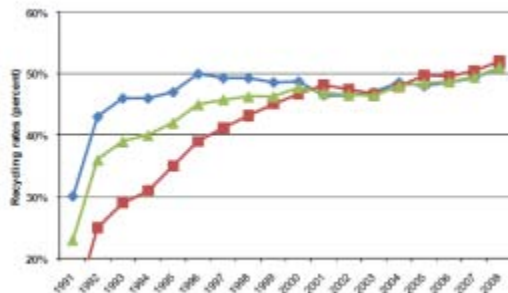
U.S. EPA systems-based view of GHG emissions (2006)



Waste Prevention and Recycling

- Assist organizations with waste prevention, recycling, and composting /organics management.
- Support sites and/or their constituents in efforts to integrate sustainable waste management practices into daily operations.
- Educate community members and host site staff on waste prevention and recycling issues.

Figure 3: Minnesota's recycling progress



Focus Areas

Living Green Outreach

- Provide outreach and education to residents, and organizations on environmental topics and practices.
- Assist host site in adopting and implementing sustainability practices internally.



Green Infrastructure

- Assist local units of government in applying green infrastructure principles related to stormwater management or urban forestry.
- Assist in collecting, managing and analyzing data for stormwater BMPs or urban trees.

Results from 2009-2010

Member Estimates of Impact:

- 7,140 community members engaged
- 710 volunteers mobilized
- Numerous sustainable practices implemented
- 275 public buildings benchmarked in statewide B3 database
- 264,691 kwh saved (includes a grant-funded lighting retrofit project)



Results from 2009-2010 (cont'd)

- All 22 members completed the program
- Host site satisfaction: 90% were satisfied with their experience
- Member satisfaction: all surveyed members either agreed or strongly agreed that they were satisfied with their service assignment
- As a result of their participation in the program:
 - 90% (of surveyed members) are more likely to consider a career in the environmental field
 - 86% are more likely to consider a career in public service
 - 95% are more likely to be committed to continued community service



Energy Conservation Position Description

1. Assist with collecting, benchmarking and reporting data on energy use/GHG emissions
2. Identify opportunities for conservation & efficiency, then help implement no/low-cost actions
3. Survey host site about energy use K/A/P
4. Conduct outreach and education campaigns, workshops, media for host site/community

1. Collect & Benchmark Energy Use – Ex: Metro CERTs 2010-11

- Working extensively with Worthington and Milan on B3 data entry for GreenStep Cities.
- Developed webinar presentation on effectively using and analyzing data from B3 system.
- Working with accounts payable personnel to institutionalize monthly entry of city utility bill data into B3.



2. Assist Conservation/Efficiency – Ex: Elk River 2010-11

- Used a kill-a-watt meter around City Hall to determine about how much electricity could be conserved by switching off computers, printers, and almost any electrical appliance.
- Used the kill-a-watt meter to calculate and report the savings that Elk River High School could enjoy by simply switching off computers in computer labs at the end of the day. It was between \$5,000 and \$10,000!

2. Assist Conservation/Efficiency – Ex: MN GreenCorps 2009-10



VendingMiser reduces energy use of cold drink vending machines.

- Powers down the machine when surrounding area is vacant.
- Automatically repowers the machine at one- to three- hour intervals to keep product cold.
- Cost \$180/unit with 12-16 month payback.
- EC members installed 79 VendingMiser units to conserve a total of 98,750¹ kwh/yr.

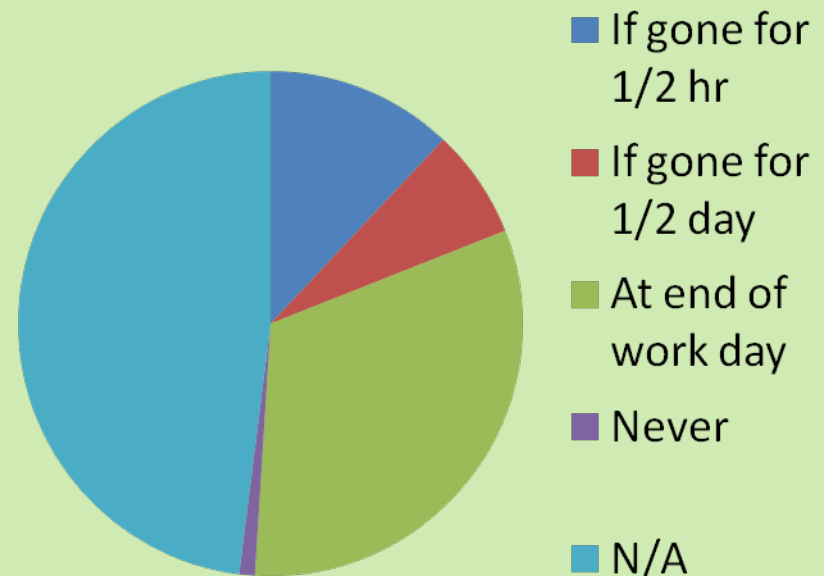
¹CIP Deemed Savings (electric) 1,250 kwh/yr/unit

3. Survey the Host Site – Ex: 2009-10 Host Sites & MPCA

Common themes:

- People are unclear what the message is from IT about turning off computers, monitors, laptops, etc.
- Many people turn off lights if they have a switch.
- People claim to experience lengthy boot up times.
- Lots of fans, desk lamps, small appliances.

When do you turn off your task light?



4. Conduct Outreach/Education – Ex: Elk River 2010-11

Project Conserve for Existing Homes

GreenCorps Member Role:



- Assists with workshops and training events
- Schedules energy audits
- Assists/inspects during some audits
- Analyzes thermal images
- Writes audit reports
- Mails reports to homeowners

Serving a Small City – Ex: Initiative Foundation/Pine River 2010-11

- Member collected, sorted and entered all city-owned building utility bills in B3 database.
- Building-specific data also being entered so can benchmark and analyze energy usage.
- Developed Pine River GreenSteps graphic .
- Regularly updates www.pinerivergreensteps.org
- ReTAP energy walk-through identified heating problem in city hall – will save money and energy.

Ex: Initiative Foundation/Pine River 2010-11

Pine River Green Steps

A local effort, built around the Minnesota Pollution Control Agency's (MPCA) GreenStep Cities program, to improve quality of life and promote sustainable growth in Pine River



Lessons Learned

- Participating in MN GreenCorps is a serious commitment for the host site:
 - supervision/mentoring of member
 - project reporting
 - in-kind reporting
 - workstation & other physical support for the member

Lessons Learned

- Projects need to be well-defined.
- Supervisor or knowledgeable staff needs to be available to the GreenCorps member.
- Half-time supervisors, ad hoc personnel, or volunteers typically are not sufficient organizational resources.
- Complementary organizations willing to host members can provide needed services to smaller cities.

What About Next Year?

- MPCA has submitted an application to AmeriCorps for funding to continue the program.
- Hoping to initiate a host site application process this spring.
- Have sign-up sheets here for interested parties (as host sites or members) to be notified.
- Or go to website link to sign up for notification. (Find RECENT **NEW!** and click on Looking ahead)
www.pca.state.mn.us/mngreencorps

Things to Keep in Mind

Members:

- are NOT experts in the field of energy conservation and efficiency.
- need mentoring and guidance as well as supervision.
- receive an annual stipend from MN GreenCorps of only approximately \$12,000.
- in greater Minnesota will be making their home in the community for the year.

More Information

**Energy Conservation
Topic Leader:**

Laura Millberg
651-757-2568

Laura.millberg@state.mn.us

Program Coordinator:

Stephanie Grayzeck Souter
651-757-2749

Stephanie.souter@state.mn.us

MN GreenCorps website:

www.pca.state.mn.us/mngreencorps

AmeriCorps website:

www.americorps.gov

